

Appl. No. 10/701,530
Amendment dated: March 25, 2006
Reply to OA of: December 27, 2005

REMARKS

Applicant has amended the claims to more particularly define the invention taking into consideration the outstanding Official Action. The claim objections have been noted as have been the Examiner's helpful suggestions for amending the claims to overcome these objections. The objected claims have been amended following the Examiner's suggestions and it is believed that these amendments obviate the objections. Accordingly, it is most respectfully requested that these objections be withdrawn.

New claims 11-13 have been added to certain aspects of the invention as fully supported by claims 1-4 as originally filed and the specification, especially at pages 2 and 3. Applicants most respectfully submit that all of the claims now present in the application are in full compliance with 35 U.S.C. 112 and clearly patentable over the references of record.

The rejection of claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over Tennent et al. has been carefully considered but is most respectfully traversed in view of the amendments to the claims and the following comments.

Applicant wishes to direct the Examiner's attention to the basic requirements of a prima facie case of obviousness as set forth in the MPEP § 2143. This section states that to establish a prima facie case of obviousness, three basic criteria first must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

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Section 2143.03 states that all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants also most respectfully direct the Examiner's attention to MPEP § 2144.08 (page 2100-114) wherein it is stated that Office personnel should consider all rebuttal argument and evidence presented by applicant and the citation of In re Soni for error in not considering evidence presented in the specification.

Tennent discloses an apparatus (or a composition) for use in liquid-phase, gas-phase, and mixed-phase reactions which provides for an efficient flow-through design within which results a low pressure drop. The substrate includes an electrically conductive layer, having a resistivity of no greater than about 100 ohm-cm. The apparatus exhibits an improved structural geometry and provides greater meniscus control.

On the contrary, claim 1 of the present application is a catalyst for converting carbon monoxide and water to hydrogen and carbon dioxide. The use of the Tennent's apparatus is remarkably different from the use of the catalyst of claim 1 of the present application. When the uses are so different, it is almost impossible for one of ordinary skilled in the art to optimize Tennent's apparatus with respect to the use in converting carbon monoxide and water to hydrogen and carbon dioxide, because one thing suitable for one use is not necessarily suitable for another use, especially when the other use is so specific and different. There is no motivation in the prior art, absent the teaching of Applicants' specification, which would be impermissible hindsight, to make the necessary modifications to arrive at the presently claimed invention.

There are so many differences between Tennent and claim 1 of the present application, to name a few, such as: "the first layer" of claim 1 of Tennent is absent in the present invention; "the second metal-containing layer superposed on the first layer"

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of claim 1 of Tennent is absent in the presently claimed invention; "the second metal-containing layer consisting essentially of elements selected from the group consisting of Ni, Cu, Rh, Fe, Ag, Au, Pd, Pt, Ru, Re and a mixture thereof" in claim 2 of Tennent, and "0.1-10% platinum (Pt) and 0-5% rhenium (Re)" in claim 1 of the present application; "the substrate consisting essentially of 36 to 50 weight % SiO_2 , 22 to 30 weight % Al_2O_3 , 2.1 to 13.5 weight % MgO , 2.1 to 2.8 weight % ZrO_2 , 5.7 to 7.5 weight % TiO_2 , 0.3 to 0.4 weight % As_2O_3 , 0 to 11.2 weight % NiO , 0 to 11.9 weight % CuO , 0 to 12.1 weight % ZnO , 0 to 20.3 weight % SnO_2 , 0 to 23.5 weight % V_2O_3 , and 0 to 11.8 weight % Co_3O_4 " recited in claim 5 of Tennent, and "a metal oxide carrier comprising a copper oxide, an aluminum oxide, and a metal oxide selected from the group consisting of zinc oxide, chromium oxide, and magnesium oxide" in claim 1 of the present invention. In view of the different uses between Tennent and the present invention, there is no motivation to modify the Tennent's apparatus and no guidelines as to how the Tennent's apparatus is to be modified.

The Examiner's rejections of claims 2-4 are most respectfully traversed. Claim 1 of the present application is clearly unobviousness over Tennent as stated in the above. For example, "said metal oxide carrier comprises a copper oxide, an aluminum oxide, and a zinc oxide, wherein said metal oxide carrier comprises 25-55% copper, based on the weight of said metal oxide carrier" in claim 2 of the present application is never can be induced from Tennent. Accordingly, it is most respectfully requested that this rejection be withdrawn.

The Official Action refers to In re Boesch. It is assumed that this is a decision of the Board of Appeals or a court but no information as to the specific decision or citation is present in the Official Action. If this decision is to be relied on in the future it is respectfully requested that an appropriate citation be provided so that Applicant may fully consider the citation.


It is Applicant's position that the Tennent reference does not establish a prima facie case of obviousness as the necessary motivation to modify the teaching of the reference is not present absent Applicant's specification. In re Fritch, 23 USPQ 1780,

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1784(Fed Cir. 1992) ("It is impermissible to engage in hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps.). Moreover, obvious to try is not the standard of obviousness under 35 U.S.C. 103(a). Accordingly, it is most respectfully requested that this rejection be withdrawn.

In view of the above comments and further amendments to the claims favorable reconsideration and allowance of all of the claims now present in the application are most respectfully requested.

Respectfully submitted,
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